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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,366

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Stanley E. Wojciechowski

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07/11/2006

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EXAMINER

KOEHLER, CHRISTOPHER M

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 07/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/501,366	Applicant(s) WOJCIECHOWSKI ET AL.	
	Examiner Christopher M. Koehler	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 9-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-8 in the reply filed on May 3, 2006 is acknowledged.

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (US Patent No. 5,882,159).

Claim 1:

Muller teaches a method of forming a sealed female fastener and panel assembly, wherein the female fastener includes an annular pilot portion (32) having an annular end face (132, figure 2), a bore extending through said pilot portion through said end face, an annular flange portion (42) having an annular end face (142) parallel to said end face of said pilot portion, and an annular groove (118) in said flange portion having a bottom wall and relatively inclined side walls including an outer side wall and

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an inner side wall inclined radially outwardly from adjacent said bottom wall wherein the method comprises, driving an annular lip (48) of a die member (12) against a panel (16) engaging said annular end face of the pilot portion, said annular lip having an inner diameter less than an outer diameter of said of said annular end face of said pilot portion (the inner diameter includes portion 56) and an outer diameter less than an inner diameter of said outer side wall of said annular groove, thereby piercing a slug from said panel having a diameter less than the outer diameter of the annular end face of the pilot portion and forming an opening through said panel (figure 1; col. 6, line 66-col.7, line 28), continuing to drive the annular lip of the die member against a panel portion surrounding the opening in the panel and against an outer periphery of the annular end face of the pilot portion thereby shaving an annular outer portion (58) of the pilot portion against an inner portion (60) of the panel portion (see left side of figure 1), continuing to drive the annular lip of the die member against the panel portion and the annular outer portion of the pilot portion and deforming the pilot portion against the bottom wall of the annular groove thereby deforming the panel portion radially inwardly and outwardly entrapping the panel portion in the annular groove and sealing the female fastener on the panel (figure 1).

Claim 2:

Muller teaches that the outer side wall of the annular groove is inclined radially inwardly and the panel portion is integral with a remainder of the panel, the method further including deforming the panel portion radially outwardly beneath the inclined outer side wall of the annular groove (figure 1).

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Claim 3:

Muller teaches that the outer side wall of the annular groove is arcuately inclined radially outwardly and the panel is deformed around the arcuately inclined surface of the outer side wall of the annular groove (see figure 3, proximate line 224).

Claim 4:

Muller teaches that the method includes shaving a cylindrical surface of the pilot portion extending from the annular end face of the pilot portion to the annular outer portion of the pilot portion and forming an arcuate portion engaging and entrapping the pilot portion (figure 1, left side).

Claim 5:

Muller teaches a method of forming a sealed female fastener and panel assembly, wherein the female fastener includes a generally cylindrical pilot portion (32) having an annular planar end face (132, figure 2), a bore extending through said pilot portion through said annular planar end face, an annular flange portion (42) surrounding said pilot portion having an annular end face (142) parallel to said end face of said pilot portion, and an annular groove (118) in said flange portion having a bottom wall and relatively inclined side walls including an outer side wall inclined inwardly from said bottom wall toward said pilot portion and an inner side wall inclined radially outwardly from adjacent said bottom wall toward said flange portion, wherein the method comprises, driving an annular lip (48) of a die member (12) through an opening in a panel (16) supported on the annular end face of the flange portion, said annular lip having a generally planar annular end face, a generally cylindrical inner surface having

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an inner diameter less than an outer diameter of said of said annular end face of said pilot portion (the inner diameter includes portion 56) and an outer diameter less than an inner diameter of said outer side wall of said annular groove (figure 1; col. 6, line 66- col.7, line 28), continuing to drive the annular lip of the die member against the annular end face of the pilot portion and an annular panel portion surrounding the opening in the panel thereby shaving an annular outer portion (58) of the pilot portion against an inner portion (60) of the panel portion (see left side of figure 1), continuing to drive the annular lip of the die member against the annular outer portion of the pilot portion and the panel portion against the bottom wall of the annular groove thereby deforming the panel portion radially inwardly and outwardly entrapping the panel portion in the annular groove and sealing the female fastener on the panel (figure 1).

Claim 6:

Muller teaches that the outer side wall of the annular groove is arcuately inclined toward the pilot portion and the panel is deformed around the arcuately inclined surface of the outer side wall of the annular groove (see figure 3, proximate line 224).

Claim 7:

Muller teaches that the method includes deforming the panel portion radially outwardly beneath the inclined outer side wall of the annular groove (figure 1).

Claim 8:

Muller teaches that the method includes shaving a cylindrical end portion of the pilot portion and forming the annular outer portion of the pilot portion to form an annular arcuate portion deformed against the panel portion (figure 1, left side).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK



DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER